

said image signal.

REMARKS

Favorable reconsideration of this application, as presently amended and in light of the following discussion, is respectfully requested.

Claims 1-14 are presently active; Claims 1 and 8-14 having been amended by way of the present amendment.

In the outstanding Office Action, Claims 1, 4, and 7-10 were rejected under 35 U.S.C. §102(a) as being anticipated by Hamilton et al (U.S. Pat. No. 5,579,055). Claims 11-14 were rejected under 35 U.S.C. §102(a) as being anticipated by Davis et al (U.S. Pat. No. 5,559,548). Claims 2, 3, and 6 were rejected under 35 U.S.C. §103(a) as being unpatentable over Hamilton et al in view of Davis et al.

Briefly recapitulating independent Claims 1 and 8-14 define receiving apparatuses, a receiving method, a transmitting method, transmission mediums, and transmission apparatuses in which electronic program guide information is added to the image signal by a broadcaster generating the image signal. As shown by way of example in Applicants' Figure 1, the image signal and the EPG signal are generated at the broadcast site. As such, sponsors of broadcasting channels can tailor the electronic program guide (EPG) information to their intent and can provide tailored information to benefit their users.<sup>2</sup>

In prior art systems, such as for example the system disclosed in Davis et al, television program schedules and promotional data are compiled at a master uplink facility, such as for example the master uplink 100 shown in Figure 1 of Hamilton, and uplinked to a satellite

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<sup>2</sup>Specification, page 2, lines 4-6 and 17-20.

170.<sup>3</sup> Davis et al specifically disclose that:

Once the processor has compiled all of the data for a particular cable system, the data is packetized and, together with the address header for the designated cable system, is uplinked to satellite 170 through digital uplink facility 150 and transmission antenna 160. The processor then repeats the above extraction and compilation procedure for each participating cable system so that the uplink facility 100 sequentially transmits data for each cable system. The entire process is repeated periodically, as the program schedule and promotional information is updated. The frequency of transmissions from the master facility can of course be different for each cable system. **Updates and changes** to the program schedule information are **made at the master uplink facility** and then transmitted to the participant cable system.<sup>4</sup> [emphasis added]

Thus, Davis et al disclose that the generation and transmittal of the EPG information is provided by the cable system and not the broadcaster who generated the image signal.

Davis et al do not teach or suggest electronic program guide information added to an image signal by a broadcaster generating the image signal, as defined in independent Claims 1 and 8-14.

Hamilton et al disclose a data controller for flow of text and electronic program guide information to a cable user.<sup>5</sup> Specifically, Hamilton et al disclose:

The present invention relates to a data controller which manages the flow of text data and electronic program guide (EPG) data to a cable television viewer. The **data controller** of the invention receives text data and EPG data from one or a plurality of local or remote data sources via a communications link, processes the received data in its internal database manager to perform data compression and the like, and **then provides** this text data and **EPG data** to the viewer under control of the head end controller. In a preferred embodiment, the text data and EPG data are inserted into the vertical blanking intervals of cable television channels to which the corresponding text data or EPG data has been assigned, and upon receipt at the viewer's television tuner, the text data and EPG data are extracted from the vertical blanking interval

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<sup>3</sup>Davis et al, column 2, lines 39-60.

<sup>4</sup>Davis et al, column 6, lines 54-67.

<sup>5</sup>Hamilton et al, Abstract, lines 1-3.

and displayed on the viewer's television. Hence, text channels and one or more EPG channels may be provided as "virtual channels" which do not require extra video bandwidth.<sup>6</sup> [emphasis added]

Furthermore, as shown in Figure 1 of Hamilton et al, information from an EPG supplier is provided to an information services processor and transmitted to a memory in a set top tuner of the television set. Thus, like Davis et al, in Hamilton et al the generation and transmittal of the EPG information is not controlled by the broadcaster who generated the image signal, but rather controlled by the information services processor.

Thus, Hamilton et al do not teach or suggest electronic program guide information added to an image signal by a broadcaster generating the image signal, as defined in independent Claims 1 and 8-14.

Thus, it is respectfully submitted that, with no teaching or suggestion in Hamilton et al or Davis et al for electronic program guide information added to the image signal by a broadcaster generating the image signal, independent Claims 1 and 8-14 patentably define over the applied prior art.

Claims 2-7 which depend directly or indirectly from Claim 1 are likewise believed to patentably define over the applied prior art.

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<sup>6</sup>Id., column 2, lines 40-57.

Consequently, in view of the present amendment and in light of the above discussions, the outstanding grounds for rejection are believed to have been overcome. The application as amended herewith is believed to be in condition for formal allowance. An early and favorable action to that effect is respectfully requested.

Respectfully submitted,

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IN THE CLAIMS

Please amend the claims as follows:

1. (Amended) A receiving apparatus for receiving an image signal transmitted from a transmitting end, said receiving apparatus comprising:

receiving means for receiving said image signal;

first output means for outputting the image signal received by said receiving means to a display;

extracting means for extracting electronic program guide information (EPG) added to the image signal by a broadcaster generating said image signal and received by said receiving means;

alteration means for altering [the] a display format of said EPG when said EPG is displayed on said display, in accordance with predetermined information; and

second output means for outputting the EPG altered by said alteration means to said display.

8. (Amended) A receiving method for receiving an image signal transmitted from a transmitting end, said receiving method comprising:

a receiving step for receiving said image signal;

a first output step for outputting the image signal received in said receiving step to a display;

an extracting step for extracting electronic program guide information (EPG) added to the image signal by a broadcaster generating said image signal and received in said receiving step;

an alteration step for altering [the] a display format of said EPG when said EPG is displayed on said display, in accordance with predetermined information; and

a second output step for outputting the EPG altered in said alteration step to said display.

9. (Amended) A transmission medium for transmitting a computer program used in a receiving apparatus for receiving an image signal transmitted from a transmitting end, [in which] said computer program [comprises] comprising:

a receiving step for receiving said image signal;

a first output step for outputting the image signal received in said receiving step to a display;

an extracting step for extracting electronic program guide information (EPG) added to the image signal by a broadcaster generating said image signal and received in said receiving step;

an alteration step for altering [the] a display format of said EPG when said EPG is displayed on said display, in accordance with predetermined information; and

a second output step for outputting the EPG altered in said alteration step to said display.

10. (Amended) A receiving apparatus for holding a computer program and using said computer program to receive an image signal, [wherein] said computer program [comprises] comprising:

a receiving step for receiving said image signal;

a first output step for outputting the image signal received in said receiving step to a display;

an extracting step for extracting electronic program guide information (EPG) added to the image signal by a broadcaster generating said image signal and received in said receiving step;

an alteration step for altering [the] a display format of said EPG when said EPG is displayed on said display, in accordance with predetermined information; and

a second output step for outputting the EPG altered in said alteration step to said display.

11. (Amended) A transmitting apparatus for transmitting an image signal to a receiving end, said transmitting apparatus comprising:

first generating means for generating said image signal;

second generating means for generating electronic program guide information (EPG);

third generating means for generating information representing a broadcasting station providing said EPG;

adding means for adding said EPG generated by said second generating means by a broadcaster generating said image signal and for adding said information representing the broadcasting station, which is generated by said third generating means, to said image signal generated by said first generating means; and

transmitting means for transmitting to the receiving end the signal obtained by adding said EPG and said information representing the broadcasting station to said image signal.

12. (Amended) A transmitting method for transmitting an image signal to a receiving

end, said transmitting method comprising:

a first generating step for generating said image signal;

a second generating step for generating electronic program guide information (EPG);

a third generating step for generating information representing a broadcasting station providing said EPG;

an adding step for adding said EPG generated in said second generating step by a broadcaster generating said image signal and for adding said information representing the broadcasting station, which is generated in said third generating step, to said image signal generated in said first generating step; and

a transmitting step for transmitting to the receiving end the signal obtained in said adding step by adding said EPG and said information representing the broadcasting station to said image signal.

13. (Amended) A transmission medium for transmitting a computer program used in a transmitting apparatus for transmitting an image signal to a receiving end, [wherein] said computer program [comprises] comprising:

a first generating step for generating said image signal;

a second generating step for generating electronic program guide information (EPG);

a third generating step for generating information representing a broadcasting station providing said EPG;

an adding step for adding said EPG generated in said second generating step by a broadcaster generating said image signal and for adding said information representing the broadcasting station, which is generated in said third generating step, to said image signal generated in said first generating step; and



a transmitting step for transmitting to the receiving end the signal obtained in said adding step by adding said EPG and said information representing the broadcasting station to said image signal.

14. (Amended) A transmitting apparatus for holding a computer program and using said computer program to transmit an image signal, [wherein] said computer program [comprises] comprising:

a first generating step for generating said image signal;  
a second generating step for generating electronic program guide information (EPG);  
a third generating step for generating information representing a broadcasting station providing said EPG;

an adding step for adding said EPG generated in said second generating step by a broadcaster generating said image signal and for adding said information representing the broadcasting station, which is generated in said third generating step, to said image signal generated in said first generating step; and

a transmitting step for transmitting to [the] a receiving end the signal obtained in said adding step by adding said EPG and said information representing the broadcasting station to said image signal.